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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,652	02/06/2002	Thomas Les Johnson	1325.5US01	8083
22865	7590	07/01/2005	EXAMINER	
ALTERA LAW GROUP, LLC 6500 CITY WEST PARKWAY SUITE 100 MINNEAPOLIS, MN 55344-7704			NGUYEN, DINH Q	
			ART UNIT	PAPER NUMBER
			3752	

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/068,652

Applicant(s)

JOHNSON, THOMAS LES

Examiner

Dinh Q. Nguyen

Art Unit

3752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-17,22-31,34-39 and 41-47 is/are pending in the application.
- 4a) Of the above claim(s) 5-7 and 31 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-17,22-27,36-39 and 41-45 is/are allowed.
- 6) ☒ Claim(s) 1,2,8-10,28-30,34,35 and 47 is/are rejected.
- 7) ☒ Claim(s) 11-13 and 46 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. The indicated allowability of claims 4, 8-10, 33, 34 of previous Office Action is withdrawn in view of the newly discovered reference(s) to Kromer. Rejections based on the newly cited reference(s) follow.

Claim Objections

2. Claims 16, 46 and 47 are objected to because of the following informalities: claim 16, the limitation "a fillet corner" repeating the same limitation of claim 14. Claim 46 depends on cancelled claim 21. Claim 47, line 4, "an impingement surface oppositely facing the orifice, the impingement surface;" should read --an impingement surface oppositely facing the orifice;--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 8, 10, 14, 28, 30 and 47 are rejected under 35 U.S.C. 102(b) as being anticipated by Kromer (U.S. Patent No. Re. 24,353).

Kromer discloses a spray nozzle, comprising: a discharge surface (not numbered) adjacent to bore 4, an orifice 4 disposed on the discharge surface; an impingement surface 10 oppositely facing the orifice 4, a deflection ridge 13, the deflection ridge 13 bridging a gap between the impingement surface 10 and the discharge surface, the deflection ridge defining a spray angle, which limits the discharge

of fluid by surfaces 6, and a fillet corner 12/13 which smoothly joins the impingement surface, and a sharp edge 16.

With respect to claims 28 and 30, the apparatus shown by Kromer is capable of performing the method or steps recited in the claims.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2, 9, 29, 34, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kromer (U.S. Patent No. Re. 24,353).

With respect to claims 2 and 29, Kromer teaches all the limitations of the claims except for the impingement angle generally of 85 degrees. However, at the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to configure the device of Kromer with the impingement angle of 85 degrees because Applicant has not disclosed that the impingement angle of 85 degrees provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either claimed angle or the Kromer's angle because they both serve the same purpose of deflecting a spraying stream. Therefore, it would have been an obvious matter of design choice to modify Kromer to obtain the invention as specified in claims 2 and 29.

With respect to claims 9 and 34, Kromer teaches all the limitations of the claims except for the spray angle of about 80-120 degrees. However, at the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to configure the device of Kromer with the impingement angle of 85 degrees because Applicant has not disclosed that the spray angle of about 80-120 degrees provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either claimed angle or the Kromer's angle because they both serve the same purpose of deflecting a spraying stream. Therefore, it would have been an obvious matter of design choice to modify Kromer to obtain the invention as specified in claims 9 and 34.

With respect to claim 35, Kromer teaches all the limitations of the claims except for the fluid that is pressurized in a range about 25-35 psi. However, at the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to provide the device of Kromer with the impingement angle of 85 degrees because Applicant has not disclosed that the fluid pressurized in a range about 25-35 psi provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either claimed angle or the Kromer's angle because they both serve the same purpose of discharging fluid out of the nozzle. Therefore, it would have been an obvious matter of design choice to modify Kromer to obtain the invention as specified in claim 35.

Allowable Subject Matter

7. Claims 14, 15, 17, 22-27, 36-39, 41-45 are allowed.
8. Claims 11-13, objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
9. Claims 16 and 46 would be allowable if rewritten or amended to overcome the objections set forth in this office action.

Response to Arguments

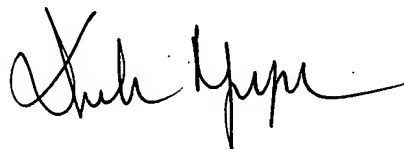
10. Applicant's arguments filed 4/04/05 have been fully considered but they are not persuasive.
11. Applicant's arguments with respect to claims 1, 2, 8-10, 28-30, 34, 35, and 46 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dinh Q. Nguyen whose telephone number is 571-272-4907. The examiner can normally be reached on Monday-Thursday 6:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Scherbel can be reached on 571-272-4919. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3752

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Dinh Q. Nguyen
Primary Examiner
Art Unit 3752

dqn